AMB Twinning Can Be Increased by Extra Feed at Breeding Season For the last 12 years investigators of the United States Department of Agriculture have been conducting experimental work to determine the

effect of different methods of feeding ewes at breeding time on the number of twin lambs produced. The results have been that a highly nourished condition of the ewes resulting from extra feed during a period commencing two weeks before and continuing throughout the breeding season, commonly known as "flushing," has shown an increase in twin lambs. (Fig. 141.) While the percentage of increase has varied from year to year, the average has been 16 more lambs per 100 ewes for the flushed ewes than for the check lots which did not receive this liberal feeding.

A study has been made of the comparative value of a supplementary grain ration and of extra-quality pasture for furnishing this extra feed. Very little difference was found in the lambing percentage of ewes flushed by these two methods; but since extra-quality pasture can usually be more cheaply and readily supplied, this method seems

advisable in most instances.

The pasture should be sufficiently luxuriant to cause the ewes to gain rapidly. Seasons sometimes occur, however, in which pastures are too short for this purpose. In such seasons it is advisable for farmers to give the flock a supplementary grain allowance of from one-half to 1½ pounds per head daily, the amount depending on the size of the sheep and the amount and quality of green feed available.

A mixed-grain ration consisting of equal parts by weight of corn and oats has been found to be a satisfactory ration for this purpose. Forage crops, such as soy beans, cowpeas, sweet clover, and alfalfa, in sections where they can be safely used for pasture, make satisfactory pasture crops on which to flush ewes, but it is questionable whether there is anything better than fresh, sweet bluegrass when it is available. Although ewes gain readily on young tender clover, much difficulty has been experienced in getting them with lamb while on this type of pasture.

C. G. Potts.

LAWN Grass Aided, Weeds Checked by Ammonium Sulphate

There are two principal ways of applying fertilizers to the lawn. One method involves direct soil treatment, in which case fertilizers like well-rotted manure

or compost, bone meal, commercial fertilizer, and similar plant-food materials are incorporated with the soil before sowing the grass seed. The second method represents broadcast applications of fertilizer materials to the established lawn. With reference to the second method, it has been found that top dressing with highly soluble nitrogen salts exerts a stimulating influence on the lawn grasses and one that is being more generally practiced in recent years.

Investigations have shown that ammonium sulphate is particularly well adapted for this purpose. This fertilizer salt is a combination of ammonia, an alkaline compound, and sulphuric acid. It is obtained in large quantities in the United States as a by-product material of the coke and illuminating gas industries. Ammonium sulphate is quite soluble in water, possesses a good mechanical condition, and is, moreover, quickly available to plants, particularly to members of the grass

family.